

Agenda Item No. 8(J)(1)(F)

Date:

April 24, 2007

To:

Honorable Chairman Bruno A. Barreiro

and Members. Board of County Commissioners

From:

George M.

County Man

Subject:

Additional Appropriation for the Program Management Consultant Providing Services

for the Implementation of the People's Transportation Plan, Contract No. TR04-PTP1

RECOMMENDATION

It is recommended that the Board approve the expenditure of funding beyond the current \$25 million appropriation approved via Resolution No. R-487-05 for the Program Management Consultant Contract No. TR04-PTP1 in order to continue carrying out services necessary for the implementation of the People's Transportation Plan (PTP). The original agenda item requesting an additional \$19 million appropriation was scheduled to be presented at the Board meeting of March 6, 2007. The item was deferred at my request in order to allow Miami-Dade Transit (MDT) sufficient time to respond to questions regarding contracting practices related to this agreement. The item was again deferred by the Board at the meeting of March 20, 2007. In order to carry the Rail corridors effort through the summer and avoid impacting the corridor schedules, I am requesting approval of a \$10 million appropriation to fund the program through the end of October. I will continue to work with MDT to address the concerns raised and a full report will be provided to the Board. The requested \$10 million appropriation was included in the original \$44 million award negotiated as a part of this contract; however, in accordance with the amendment made during Board consideration of the original award on May 3, 2005, Board approval is required prior to exceeding expenditures of \$25 million.

SCOPE

This item has a countywide impact. The districts impacted by the three rail corridors are Districts 1, 2, 3, 6, 10 and 11.

FISCAL IMPACT

The fiscal impact of the additional appropriation of \$10 million was included in the original \$44 million award, as noted in the May 3, 2005 resolution authorizing the execution of this contract.

The amount of this contract is part of the total program budget of over \$4 billion for PTP work over the next ten years that may be assigned to the PMC and is included in the Pro Forma which anticipates an estimated 50% funding from FTA, 25% from FDOT and other local sources, and 25% to be drawn from the Charter County Transit System Surtax. Should Federal or State contributions differ from anticipated levels, those percentages may be adjusted accordingly. Such adjustments, to the extent that they exist, will be summarized in the annual update of the Pro Forma. All projects to be managed by the PMC were included in Ordinance No. 02-116, Exhibit 1 - PTP Rapid Transit Improvements, passed and adopted by the Board on July 9, 2002, and its subsequent amendments.

TRACK RECORD/MONITOR

The firm of Parsons Brinckerhoff has awarded contracts with the following County departments: Miami-Dade Transit - \$44,413,119
Seaport Department - \$2,000,000
Metropolitan Planning Organization - \$1,623,683
Water & Sewer - \$100,361
Aviation - \$20,000

The contract monitor for this agreement is Albert A. Hernandez, P.E., Deputy Director, Engineering Planning and Development.

BACKGROUND

As a result of the approval of the People's Transportation Plan (PTP) by voters on November 5, 2002, the County recognized the need to develop an effective organization to manage the implementation of the PTP and, in particular, the development of its rail corridor projects. It was recommended by the Office of Performance Improvement, through their "Transit Summer Study" distributed to the BCC on September 12, 2003, that we employ a program management model that uses the appropriate mix of County staff supported by a private program manager. This model offers tremendous flexibility of control in terms of in-house staffing sizes, allows the County to tap required expertise on an as needed basis, preserves some institutional expertise upon program completion, and accommodates the structuring of appropriate checks and balances between consultants and County staff. The Federal Transit Administration (FTA) also encourages the use of a Program Management Consultant (PMC) for implementation of such an extensive program. In fact, most transit agencies use a PMC for their capital programs. Separate firms would be used to perform planning, design and inspection services.

On May 3, 2005, the Board awarded a contract to Parsons Brinckerhoff Quade & Douglas to provide Program Management Consultant (PMC) services for the implementation of the PTP with an initial contract ceiling of \$44 million. The \$44 million contract ceiling included the initial investment necessary to implement the Earlington Heights-Miami Intermodal Center (EH-MIC) Connector and to advance the North Corridor and the East-West Corridor to their initial stages of federal approval. Also included in this ceiling were allowances to help provide oversight to other MDT PTP-funded capital projects as well as limited support to Public Works and the Metropolitan Planning Organization (MPO) on their PTP projects. The contract was approved with the amendment that prior to exceeding expenditures of \$25 million, the Board must approve further appropriations. A Notice to Proceed (NTP) was issued on June 1, 2005.

The Program Management Consultant (PMC) currently functions as special support staff to Miami-Dade Transit (MDT) and supports the Public Works Department (PWD) and the Metropolitan Planning Organization (MPO) for all People's Transportation Plan (PTP) project work. The PMC also provides assistance to MDT staff in the coordination and oversight of all Design Consultants and Construction Management Consultants (Construction, Engineering & Inspection services performed by other firms) for all MDT capital projects.

To date, the PMC has been an invaluable asset to the County. They have served as an extension of MDT's staff to manage the three corridor contracts comprising the Orange Line: Earlington Heights - Miami Intermodal Center (EHT-MIC), North Corridor and the East-West Corridor. The PMC has also provided required program studies and management for the advancement of these corridors as well as for other projects included in the PTP. All the corridors are presently in planning, preliminary engineering or design. A great deal of effort is required during these preconstruction phases. Program Management work typically ranges from 3% to 7% of the total program cost depending on the complexity of the program. We are presently expending, as originally estimated, at a rate of 3% to 4% of the program's original budget, which in the 2004 pro-forma was \$2.4 billion over seven years. The 3% to 4% rate equals expenditures between \$72 million to \$96 million over these seven years. On this contract, MDT is within the program budget having expended approximately \$18.8 million in 19 months through December 2006 for the advancement of the Orange Line and assistance on other PTP Capital Projects.

Since the approval of the original item, the requirements for the PMC's services have increased. The additional requirements include PMC's assistance to MDT in right-of-way activities for the North Corridor project (purchasing 116 parcels), managing new starts preliminary engineering and systems engineering for the North Corridor, developing FTA requested documents for permission to enter into final design, Rail Vehicle Rehabilitation procurement efforts, FTA New Starts application for East-West Corridor and Earlington Heights-MIC Airport Extension Study (see section below titled Justification for Additional Appropriations for more details).

As we advance the corridors, it will be necessary to augment this contract through Board-approved supplemental agreements to continue to manage the corridors. Fully implementing all three priority corridors (the entire Orange Line) is now estimated to require program management fees in the range of \$126 to \$168 million and an increase in the original contract duration.

DISADVANTAGED BUSINESS ENTERPRISE AND MINORITY BUSINESS PARTICIPATION

The PMC is committed to attaining the established 25% DBE participation goal over the life of the contract. DBE participation from the original PMC team stands at approximately 12%. Since the inception of the contract, MDT permitted and, in some cases requested, the addition of specific subcontractors to the team. Total participation, inclusive of these added subconsultants would bring the current DBE participation level to approximately 18%. The DBE regulations allows for additions to count towards existing goals, with a good cause showing that an original DBE firm could not perform its assigned task, since the prime has already committed a specific percentage to attain their goals to the original DBE team members through the contract. That is, work performed through firms that were not a part of the original team may count after the existing goal has been met through the original team members. The PMC is developing a plan with MDT's Office of Civil Rights to meet the 25% goal in light of this circumstance. In order for the PMC to affirm its increased 18% participation level through the additional firms, negotiations must take place with each of the original DBE subs so that the combined percentage commitment, including the new firms, totals 25%. Any further addition of subs inconsistent with DBE rules will be prohibited, and MDT has developed guidelines for its contract staff to clarify when subcontractor additions can be considered along with the process that should be followed. As the program matures, opportunities for participation by DBE firms will increase with each new annual work program.

PROGRAM WIDE ACCOMPLISHMENTS

The following are specific accomplishments from the PMC since June 1st, 2005. (See attachment No. 1 for more details). In order to plan and design the corridor projects, several studies, criteria updates, specifications, and technical papers were required from the PMC to advance the corridors.

- 1. Updating MDT's Design Compendium. This consisted of rewriting the existing Metrorail design criteria for the rail expansions. The compendium was last written in the 1970's for our existing systems. The major rewrite was completed this year for use in the planning and design of each of the 3 corridors. The compendium consists of all design criteria used as a basis for the design of our heavy rail system. Areas include structural, architectural, electrical, mechanical, plumbing, civil, systems and landscaping criteria. The compendium will also be used to design all future corridors.
- 2. Other critical studies were needed to be completed by the PMC to determine the infrastructure needs for the planning and design of the corridors. These included:
 - Rail yard & shop study
 - Train control study

- Central control study
- Contact rail study
- 3. Other tasks that have been performed to advance the corridor projects follow. Many of these tasks are required by either the Federal Transit Administration (FTA) or the Florida Department of Transportation (FDOT).
 - Public outreach
 - National Environmental Protection Act (NEPA) Documentation
 - FTA New Starts Applications
 - Right of way acquisition services
 - Value engineering services
 - Cost reviews
 - Cost estimating
 - Document control
 - Design and engineering oversight and support
 - Needs assessment study (operations & maintenance)
 - Safety & Security plans (certifiable assets/items, preliminary hazard analysis, preliminary threat & vulnerability analysis, preliminary system hazard analysis, safety & security design criteria, design conformance certification checklist, preliminary safety & security certification plan, site based threat & vulnerability analysis, operations hazard analysis, system safety and security specification requirements, safety & security test requirements, specification conformance checklist)
 - Special track work directive drawings
 - Standard drawings
 - Plans review

EARLINGTON HEIGHTS TO MIC CORRIDOR

The PMC is assisting MDT with the project management for this corridor. A critical activity included the preparation of an environmental assessment required by the United States Coast Guard in order to permit the crossing over the Miami River. In 2006, the PMC finished the assessment and the project received a Finding of No Significant Impact (FONSI). MDT is now moving forward on obtaining the permit. Final design is underway and has been completed beyond the 60% stage. The PMC is assisting MDT and the corridor consultant in the evaluation of possible solutions to take Metrorail into the airport. Other critical activities include management of budget and schedule, technical assistance to the corridor designer, value engineering, and plans review. The PMC introduced value engineering recommendations consisting of the reconfiguration of the MIC-Earlington Heights eastbound connection with a cost savings of approximately \$5 million and the redesign of an extensive at-grade bus plaza with estimated savings of \$10 million (from \$30 million to \$20 million).

NORTH CORRIDOR

The PMC is assisting MDT with the project management for the preliminary engineering activities on this corridor. The preliminary engineering phase of this contract is complete, and the PMC is now overseeing the additional engineering efforts prior to commencing final design. Critical activities include management of budget and schedule, assisting MDT staff with the New Starts (FTA's federal funding process), developing the FTA mandated Right-of-Way Acquisition and Management Plan (RAMP), technical assistance to the corridor designer, value engineering, and plans review. The PMC also provided valuable support which helped County staff during negotiations for the final design contract for the North Corridor.

EAST WEST CORRIDOR

The PMC is assisting MDT with the project management for the planning activities on this corridor. The PMC has assisted the corridor consultant to significantly advance the planning phase of this contract. Major activities performed include helping MDT identify several possible alignments along the corridor for cost effectiveness, coordinating with FTA and FDOT and advancing the Supplemental Draft Environmental Impact Statement, within the framework negotiated with FTA. Public outreach has been an important area where significant progress has been made. In order to comply with the federal NEPA process, project scoping was conducted in 2006, involving intensive coordination with FTA, FDOT, agency and private stakeholders, and the general public.

MDT OPERATIONS SUPPORT

The PMC provides support to the Operations Division with operations analysis, operations planning and simulations to improve the effectiveness and efficiencies of the operating systems. Specific tasks include studies of the Lehman Yard and Shops, train control, integrated central control, fare collection systems, train operations simulations, criteria and procedure updates, and other miscellaneous elements.

The PMC is providing ongoing technical support for the Universal Automated Fare Collection System (UAFCS) Program. This includes coordination with the South Florida Regional Transportation Authority (SFRTA) and the Program Management Team Working Groups on technical, implementation, operational and policy issues and documentation of Business Rules and Operational Concept.

MPO AND PUBLIC WORKS SUPPORT

For the MPO, the PMC provided support services for the Miami-Dade Bus Rapid Transit (BRT) Implementation plan, which included Biscayne Boulevard, Flagler Street and Kendall Drive Pilot BRT corridors. This included concept designs for a series of BRT priority facilities on each corridor and a Queue By-Pass and Bus Turnaround facility on the Kendall Drive Corridor. The concepts included the use of Transit Signal Priority at each location.

Working in coordination with the Department of Public Works, the PMC has been supporting right-of-way acquisitions for the MIC-Earlington Heights and North Corridor Projects.

JUSTIFICATION FOR ADDITIONAL APPROPRIATION

Significant progress has been made in the development and design of the Orange Line rail corridor projects, as well as with the other PTP projects. During the coming year, critical stages of final design will be performed, requiring increasing levels of coordination, technical oversight, and program management. The PMC will provide technical expertise to augment MDT staff to perform these important functions. The PMC work program for 2007 is planned to include the following elements:

ORANGE LINE RAIL CORRIDORS

- Management and technical oversight of planning and final design (all projects)
- FTA New Starts Application (North Corridor and East-West)
- MIC-Earlington Heights extension to airport studies
- Agency coordination support
- Travel demand forecasting systemwide
- Transit oriented development planning and Master Developer scope development
- Project controls, scheduling and cost estimating



- Financial planning
- Safety and security plans, hazard and threat management
- Right-of-way acquisition support
- Utilities relocation coordination and agreements

OPERATIONS AND MAINTENANCE SUPPORT

- Bus maintenance facility needs assessment
- Operations procedures manual update
- Fare collection system technical support
- Rail vehicle rehabilitation/procurement support
- Metromover wayside assessment

SPECIAL STUDIES

- Design criteria updates
- Value Engineering
- Contact rail hardening study
- Backbone communications system evaluation
- Integrated central control studies
- Lehman yard test track criteria for design/build
- Systemwide rolling stock study

EXTENSION OF STAFF

- Quality Control
- Public Outreach
- PTP Jobs Program and Business Outreach
- Advertising and media relations
- DBE Compliance
- Document Management

For additional description of tasks planned in the 2007 work program, see Attachment No. 2.

FISCAL IMPACT

The fiscal impact of the additional appropriation of \$10 million was included in the original \$44 million award, as noted in the May 3, 2005 resolution authorizing the execution of this contract.

The amount of this contract is part of the total program budget of over \$4 billion for PTP work over the next ten years that may be assigned to the PMC and is included in the Pro Forma which anticipates an estimated 50% funding from FTA, 25% from FDOT and other local sources, and 25% to be drawn from the Charter County Transit System Surtax. Should Federal or State contributions differ from anticipated levels, those percentages may be adjusted accordingly. Such adjustments, to the extent that they exist, will be summarized in the annual update of the Pro Forma. All projects to be managed by the PMC were included in Ordinance No. 02-116, Exhibit 1 - PTP Rapid Transit Improvements, passed and adopted by the Board on July 9, 2002, and its subsequent amendments.

Assistant County Manager

Date

TO:

Honorable Chairman Bruno A. Barreiro

DATE:

April 24, 2007

and Members, Board of County Commissioners

FROM:

Murray A. Greenber

County Attorney

SUBJECT: Agenda Item No. 8(J)(1)(F)

Please	note any items checked.
-	"4-Day Rule" ("3-Day Rule" for committees) applicable if raised
	6 weeks required between first reading and public hearing
	4 weeks notification to municipal officials required prior to public hearing
	Decreases revenues or increases expenditures without balancing budget
	Budget required
	Statement of fiscal impact required
·	Bid waiver requiring County Manager's written recommendation
	Ordinance creating a new board requires detailed County Manager's report for public hearing
· · · · · · · · · · · · · · · · · · ·	Housekeeping item (no policy decision required)
	No committee review

Approved	Mayor	Agenda Item No.	8(J)(1)(F)
Veto		04-24-07	
Override			

RESOL	UTION NO.	

RESOLUTION **AUTHORIZING ADDITIONAL** APPROPRIATION OF \$10 MILLION INCLUDED UNDER THE PROFESSIONAL **SERVICES AGREEMENT BETWEEN** MIAMI-DADE COUNTY AND PARSONS BRINCKERHOFF OUADE AND DOUGLAS, INC. TO PROVIDE PROGRAM MANAGEMENT CONSULTING SERVICES FOR IMPLEMENTATION OF THE PEOPLE'S TRANSPORTATION PLAN, CONTRACT NO. TR04-PTP1

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board approves the additional appropriation of \$10 million included under the Professional Services Agreement with Parsons Brinckerhoff Quade and Douglas, Inc. to provide Program Management Consulting services for the implementation of the People's Transportation Plan Contract No. TR04-PTP1, in substantially the form attached hereto and made a part thereof; and authorizes the County Mayor or his designee to execute same for and on behalf of Miami-Dade County.

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, who

The foregoing resolution was offered by Commissioner moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

Bruno A. Barreiro, Chairman Barbara J. Jordan, Vice-Chairwoman

Jose "Pepe" Diaz Carlos A. Gimenez Joe A. Martinez Dorrin D. Rolle Katy Sorenson Sen. Javier D. Souto

Audrey M. Edmonson Sally A. Heyman Dennis C. Moss Natacha Seijas Rebeca Sosa

The Chairperson thereupon declared the resolution duly passed and adopted this 24th day of April, 2007. This resolution shall become effective as follows: (1) ten (10) days after the date of its adoption unless vetoed by the Mayor, and if vetoed, shall become effective only upon an override by this Board, and (2) either i) the Citizens' Independent Transportation Trust (CITT) has approved same, or ii) in response to the CITT's disapproval, the County Commission reaffirms its award by two-thirds (2/3) vote of the Commission's membership and such reaffirmation becomes final.

MIAMI-DADE COUNTY, FLORIDA BY ITS BOARD OF COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By:	
Deputy Clerk	

Approved by County Attorney as to form and legal sufficiency.

Bruce Libhaber

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Attachment No. 1

Additional Appropriation for the Program Management Consultant Providing Services for the Implementation of the People's Transportation Plan, Contract No. TR04-PTP1

Completed and On-going PMC Tasks and Special Studies

In addition to general management and administrative support provided by the PMC, the following describes some of the key tasks and special studies that have been performed by the PMC.

Design Compendium and Manuals

Design Compendium

Reviewed, updated, and expanded the original Design Criteria which serves to guide the designers of the PTP projects.

Plans Preparation Manual and CAD Manual

Updated and expanded the Plans Preparation and Computer-Aided Drafting standards manuals to guide the designers and ensure consistent documents.

Estimating Manual

Prepared an estimating manual which provides guidance in the preparation of capital cost estimates. This ensures credible cost estimates that will meet the requirements of MDT and their funding partners such as FTA and FDOT.

Design Review Support of Engineering Submittals

Provided design review support to check and coordinate design progress on the MIC/Earlington Heights and North Corridor projects. Developed control point checklists to establish requirements and assist in reviewing contract documents submittals at each required level of design submittals.

Operations Planning Special Studies

Yard and Shops Study

PMC evaluated the current configuration, condition and capacity of the Lehman Yard and Shop facilities to recommend upgrades to improve efficiency and to assess requirements to accommodate the additional vehicles that will be required for new services for the North Corridor and MIC/Earlington Heights lines.

Train Control Study

The exiting Train Control System was evaluated to determine the capacity and constraints of the existing system. This included system configuration, maximum headway capacity, system recovery, reliability, and maintenance review. This information was used to recommend improvements and optimize operating scenarios that were considered for the complete system including future extensions.

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Universal Automated Fare Collection System (UAFCS) Program

The PMC is providing ongoing technical support for the UAFCS program. This includes coordination with the South Florida Regional Transportation Authority (SFRTA) and the Program Management Team Working Groups on technical, implementation, operational and policy issues and documentation of Business Rules and Operational Concept. Working Group meetings were held with MDT Operations, MDT Finance, MDT Customer Service, MDT Marketing, MDT Planning, and MDT Information Technology (IT). Completed documents for the Request for Proposal have been submitted.

Train Simulations and Operations Planning

The PMC developed an integrated simulation model of train operations to evaluate existing operations as well as many proposed operating scenarios for the North Corridor, MIC-Earlington Heights extension, and East-West Line. This was a key part in determining the most efficient plan in terms of ridership, operation and maintenance costs, and financial feasibility, which were presented to the FTA in the North Corridor New Starts Application.

Central Control Study

The PMC reviewed existing manuals, drawings, specifications, and design criteria and performed site visits. A report on the findings includes a summary of the Operations Division desired operational improvements, options for obtaining the desired capacity and functionality, conceptual cost estimates for those options, and a recommended option.

Advancing Transit Corridors

MIC-Earlington (SEIR)

PMC assisted MDT in planning the proposed route which was selected as the Locally Preferred Alternative (LPA). It also successfully prepared a State Environmental Impact Report (SEIR) which was approved by the FDOT and the United States Coast Guard. The Corps was the lead Federal agency since this locally funded project requires a federal permit to bridge over the Miami River.

New Starts Support

PMC prepared the 2005 and 2006 submittals of the North Corridor New Starts Application to FTA. It also supported planning and FTA coordination for the East-West Corridor during this period.

Land Use – Transit Planning General Consulting

The PMC provided general support to MDT's effort to strengthen the ties between land use planning, infrastructure developments and transit both countywide and in specific corridors. In cooperation with MDT and the Miami-Dade Department of Planning and Zoning, (DP&Z), a transit-oriented development program was initiated to study existing land use patterns, assess the real estate market, conduct design charrettes with

community leaders and other interested parties in the corridor, and to develop strategies for implementation.

The program will be implemented in three phases with the overall process resulting in the adoption of transit-supportive plans for the areas ½ mile around four of the proposed stations in the North Corridor reflecting the community's vision for the future.

Southwest Corridor Study

The PMC prepared studies and recommendations for potentially using CSX freight railroad corridors for passenger service. This included the Dolphin Corridor along the north side of SR 836 to the Turnpike, and the Southwest Corridor which follows tracks running from Miami Intermodal Center to SW 167th Avenue and Metro Zoo. The results of these studies led to discussions with the CSX on implementing a commuter service in the Southwest Corridor.

Metrorail Extension to Florida City

The PMC prepared a study and conceptual cost estimates to extend transit service to Florida City. Options included the feasibility of utilizing a hybrid vehicle capable of operating along a retrofitted version of the existing busway and along the limits of the Phase I Metrorail System. This was a quick assessment of potential technical and cost issues that could affect a decision of whether or not to include this alternative in further studies.

Other Special Tasks and Studies

Contact Rail Study

Following hurricanes in 2006 which damaged sections of contact rail on the Metrorail system, the PMC prepared a prototype Design, Furnish and Install design package for procuring a new type of contact rail anchor.

Emergency Repairs due to Electrical Fire

In response to an electrical fire on the guideway near Northside Station, the PMC assessed structural damage and causes and made recommendations to remedy the situation.

Pedestrian/Bicycle Overpass Studies

Conducted alternatives analyses and conceptual designs for pedestrian overpasses for the University, 27th Avenue/Coconut Grove and Dadeland South Metrorail Stations. Prepared a study to prioritize the implementation of proposed improvements.

Value Engineering

Value Engineering studies to date have yielded substantial savings in potential costs on the MIC/Earlington Heights and North Corridor Projects. The PMC conducted a Value

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Engineering Program in accordance with FTA guidelines, using qualified transit industry professionals, to participate in Value Engineering reviews of specific project facilities, systems, operations and other aspects of each corridor project.

System Security Program

Developed a PTP System Security Program Plan outlining the process for security design, development, documentation and verification.

Flagler Market Place Study

PMC assessed the impacts of re-routing the existing MDT bus operations along West Flagler Street between Biscayne Boulevard and Northwest/Southwest 1st Avenue as proposed by the Downtown Development Agency and the City of Miami.

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Attachment No. 2

Additional Appropriation for the Program Management Consultant Providing Services for the Implementation of the People's Transportation Plan, Contract No. TR04-PTP1

Description of some of the PMC Tasks for 2007

Orange Line Rail Corridors

Management and technical oversight of planning and final design (all corridor projects)

PMC has management and technical oversight responsibilities for the North Corridor, MIC-Earlington Heights and East-West Corridor projects, including criteria development, design review, and coordination with other agencies, stakeholders and utility companies.

FTA New Starts Applications (North Corridor and East-West)

PMC prepares the New Starts Application documents that are submitted to the FTA each year to support federal funding requests. This process is required to secure full funding grant agreements with FTA for the North Corridor and East-West Corridor. PMC assists MDT with ongoing coordination with the FTA throughout the year.

MIC-Earlington Heights extension to airport studies

PMC is working with the MIC-Earlington Heights Design Consultant to study alternatives to the Airport Peoplemover. These studies include options to extend Metrorail from the MIC into the airport.

Agency coordination support

PMC provides assistance to MDT and the Corridor Design Consultants in coordinating issues of interested or affected third parties, including other agencies such as FTA, FDOT, Corps of Engineers, DERM, and other County departments.

Travel demand forecasting systemwide

PMC will develop a 2016 Dade-Broward travel model to estimate transit ridership systemwide. This includes all MetroRail corridors, MetroMover and MetroBus riders. This is important information for operations planning and is required input for the FTA New Starts Application process. It is also used to optimize operating plans for existing and future services.

Transit Oriented Development (TOD) planning and Master Developer scope of development

This year's work plan addresses Phase III of TOD for the North Corridor. This is a continuation of the coordination of previous phases with the selected consultants, Miami-Dade County Department of Planning and Zoning (MDCDP&Z), and PMC TOD team. A series of TOD Design Charrettes will help to finalize TOD plans for four station areas with respect to scope, budget, and completion schedule.

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PMC will provide senior level advice to MDT for the solicitation and selection of a Master Developer to manage the complex development process for properties at one or more station sites.

Project controls, scheduling and cost estimating

PMC will provide staff to schedule, monitor and report progress of efforts and costs. PMC will incorporate MDT comments into the Estimating Manual and Procedures for implementation of a Cost/Scheduling Project Control System for the PTP work.

Financial planning

PMC will review MDT's financial analysis model including approach, underlying assumptions, inputs and outputs to demonstrate the financial capacity of MDT to successfully implement and operate the project.

Safety and security plans, hazard and threat management

PMC will support MDT in the development of a System Safety and Security Program Plan. Several tasks are a continuation of tasks begun in 2006 (Phase I) and will be completed in the first two months. PMC will conduct a series of hazard analyses including systems, operations, and threat and vulnerability with individual reports.

Right-of-way acquisition support

PMC will assist MDT with all areas of Right-of-Way acquisition from updating plans and procedures, identifying permitting needs and procedures, descriptions and certifications, to appraisal and acquisition services. PMC will support negotiations, business damage evaluation, mediation, suit preparation and legal support.

Utilities relocation coordination and agreements

PMC will provide technical support to MDT for development of master and detailed agreements to support utility relocation; and various agreements with agencies and railroads to secure permits, operations and maintenance agreements.

Operations and Maintenance Support

Operations Planning and Maintenance Support

PMC will support the Operations Division by performing special studies as requested which may include scheduling and tracking on-going operations tasks, development of Consumer-Focused Service Implementation Strategies, development of Predictive Maintenance Program, and assisting with management functions.

Bus maintenance facility needs assessment

PMC will evaluate the operation of the existing Medley Bus Maintenance Facility in order to consider alternative courses of action to expand and improve its operation including the optional location of potential new maintenance facility based on the 2025/2030 Bus Operation Plan.

Operations procedures manual update

PMC will assist the Operations Division with a review and assessment of the Division's policies, procedures, plans, processes and documents.

Fare collection system technical support

PMC's overall support program encompasses the full Universal Automated Fare Collection System (UAFCS) development and implementation, and would include program management and technical support for

- UAFCS contractor procurement process;
- UAFCS contract implementation, administration, design development, factory testing;
- Other specialized program services as requested that are related to the Integration Contract

Rail vehicle rehabilitation/procurement support

PMC will support MDT with the following:

- Preparation of Request For Proposal for Rail Vehicle Rehab Quality Control and participate in procurement and selection process
- Review of Rail Vehicle Rehab QC contractors QA/QC Plan and Manual as required
- Technical oversight of contractor's inspection services for compliance with MDT Quality initiative and approved QA/QC Manual

Metromover wayside assessment

PMC will perform an assessment of the Metromover wayside facilities, and provide a "Rehabilitation Alternative Analysis Report" and a "Wayside & New Vehicle Compatibility Analysis Report"

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Special Studies

Design Compendium updates

PMC developed several Design Compendium volumes to an interim release level during 2006, and they will be updated as circumstances require during 2007, include

- Volume I Systemwide
- Volume II Stations
- Volume III Guideways
- Volume VII System Equipment

Value Engineering (VE)

PMC will assist with the establishment of a Value Engineering Program in accordance with FTA guidelines which will focus on cost effective alternative solutions or design approaches. PMC will provide certified VE Specialist to overview VE procedures, organize and lead the review sessions, and document the results.

Contact Rail hardening study

PMC will use current information to prepare a Contact Rail Design Criteria Package encompassing structural criteria required for a contact rail support insulation and overboard system with additional configuration and electrical requirements for MDT's procurement for North Corridor application initials.

Backbone communications system evaluation

PMC assisted by MDT will evaluate the efficiencies and capacity of the existing Transmission Backbone System (TBS).

- survey/review existing network
- interview various MDT staff
- visit transit properties
- provide preliminary and final reports

Integrated central controls studies

PMC to prepare technical Performance Specifications for the integration of all MDT Transportation Operations into a single consolidated control center that MDT plans to procure.

Lehman Yard test track criteria for design-build

PMC to prepare a Design-Build criteria package for bidding to accomplish the design, permitting, construction and quality assurance for a test track at the Lehman Yard including test track layout drawing and cost estimate.

Systemwide rolling stock study

PMC will perform this study to assess existing storage capacity in order to determine if Lehman Yard can accommodate the additional vehicles needed to accommodate the Metrorail line extensions.

Extension of Staff

Quality Control

PMC assists MDT in conducting and maintaining a Quality Assurance/Quality Control (QA/QC) function for the PTP to be followed by all program participants. The PMC QA Manager assisted with the development of the MDT QA Program that meets or exceeds the FTA requirements. The PMC monitors compliance with the QA Program Plan by QA audit and/or other QA/QC activities as required and directed by MDT, including:

- Establish the QA Plan for the PMC
- o Review and accept Quality Plans from subconsultants
- o Perform audits
- o Participate in design reviews
- o Attend and participate in weekly staff and corridor design review meetings
- o Oversee a systematic approach to address management responsibilities, document quality system, configuration management, design control, purchasing, process control, inspection and testing, training and corrective actions.
- o Gather and track audit / surveillance and NCR data for use in the analysis of trends and evaluation of corrective / preventive action effectiveness.
- o Assist MDT QA Oversight in preparing procedures and reports for stakeholders
- o Provide training as required.

Public Outreach

Multiple benefits accrue from involving public stakeholders in a proactive way throughout all phases of project planning and execution. The PMC will assist MDT's goals to inform the community about the PTP's projects and actively seek and incorporate public input into the decision-making process to ensure each project meets the community needs.

PTP Jobs Program and Business Outreach

PMC to develop a comprehensive Jobs Program to clearly identify employment opportunities with MDT, PMC and other contractors and consultants associated with the PTP projects.

Advertising and media relations

PMC to provide graphics support to the Advertising and Media Relations Division of MDT.

DBE compliance

The PMC provides a Disadvantaged Business Enterprise (DBE) Contract Compliance Manager that is responsible for ensuring the meaningful participation of DBE firms involved in the PTP, and reports directly to MDT Office of Civil Rights.

Document Management

The PMC will assist MDT in maintaining a document control system, including systems to receive, distribute and store documents of the program. It also includes updating procedures for the interface and processing of documents between the Program participants.